

CLAIM AMENDMENTS

Enter
B5B
9/19/07

1. (currently amended) A method of determining whether to allow or suppress deployment of a vehicular inflatable restraint for a vehicle occupant based at least in part on an output signal of a sensor responsive to occupant weight applied to a vehicle seat, the method comprising the steps of:

comparing a filtered version of said output signal to a threshold having a default value corresponding to a predetermined occupant weight under a given set of conditions;

measuring a vertical acceleration of the vehicle;

~~determining a free mass of the vehicle occupant based on a variation of said output signal with respect to a variation of the measured vertical acceleration;~~

sampling output signal values and computing an average of the sampled values;

identifying sampled output signal values that are within a specified percentage of said average;

computing a first variance of the identified output signal values;

computing a second variance of the measured vertical acceleration;

determining a free mass of the vehicle occupant according to a ratio of the first variance and the second variance;

establishing a predetermined range of free mass values corresponding to an average weight occupant;

adjusting said threshold below said default value when the determined value of said free mass is above a the predetermined range of free mass values;

adjusting said threshold above said default value when the determined value of said free mass is below the predetermined range of free mass values;

maintaining a current value of said threshold when ~~the determined value of~~ said free mass is within said predetermined range of free mass values; and